

CLAIMS

1. A reception apparatus comprising:
 - a plurality of antennas spaced at a predetermined interval or more;
 - 5 a radio receiver that amplifies signals received in the antennas;
 - a reception power calculator that calculates reception power of a signal received in each of the antennas;
 - 10 an AGC gain calculator that calculates a gain such that amplified reception power is a predetermined value to instruct to the radio receiver;
 - a controller that instructs the AGC gain calculator to calculate a gain to amplify a received signal received
 - 15 in some of the antennas, when the reception power calculator calculates reception power of a signal received in another one of the antennas; and
 - a combiner that combines amplified signals received in the antennas.
- 20 2. The reception apparatus according to claim 1, wherein the radio receiver comprises a plurality of amplifiers that amplifies a signal received for each of the antennas, and a first switch that outputs an instruction output from the AGC gain calculator to either
- 25 of the amplifiers, the reception power calculator comprises a plurality of power calculators that calculates a power value of a signal received

corresponding to each of the antennas, and a second switch that outputs a power value of one of the power calculators that has completed calculation of the power value to the AGC gain calculator, and the controller instructs the
5 second switch to output to the AGC gain calculator a power value output from either of the power calculators corresponding to one of the antennas targeted for AGC calculation, and further instructs the first switch to output the instruction output from the AGC gain calculator
10 to corresponding one of the amplifiers.

3. The reception apparatus according to claim 1, wherein the radio receiver comprises a plurality of amplifiers that amplifies a signal received for each of the antennas, a first switch that outputs an instruction
15 output from the AGC gain calculator to either of the amplifiers, and a third switch that selects a signal output from one of the amplifiers corresponding to one of the antennas targeted for calculation of a power value, the reception power calculator calculates the power value
20 of the signal selected in the third switch, and the controller instructs the first switch to output an instruction output from the AGC gain calculator to corresponding one of the amplifiers, and further instructs the third switch to select a signal output from
25 one of the amplifiers corresponding to one of the antennas targeted for calculation of a power value.

4. The reception apparatus according to claim 1,

further comprising:

an AGC operation mode switch that instructs an AGC update period,
wherein the AGC gain calculator notifies the controller
5 of whether the AGC update period is less than or more
than the time obtained by multiplying processing time
of power calculation and gain calculation by the number
of antennas, and when the AGC update period is less than
the time obtained by multiplying the processing time of
10 the power calculation and the gain calculation, the
controller instructs the AGC gain calculator to calculate
a gain to multiply a received signal received in some
of the antennas, at the time the reception power calculator
calculates reception power of a signal received in another
15 one of antennas.

5. A reception method wherein radio signals are
received in a plurality of antennas, with respect to the
signals received in the plurality of antennas an AGC gain
of one of the antennas is calculated when reception power
20 of the other antenna is calculated, the signal received
in each of the antennas is amplified by the calculated
AGC gain, and the signals received in the antennas are
selected and combined.